JENNIFER YEO

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EDUCATION

Northeastern University | Boston, MA — May 2023

Candidate for Bachelor of Science in Bioengineering: Medical Devices; Minor: Mechanical Engineering — GPA: 3.61

Honors and Awards: Dean's List (Fall 2019, Spring 2020, Spring 2021)

Activities: Biomedical Engineering Society Club 2021 Peer Mentor, College of Engineering 2021-2022 Peer Mentor

EXPERIENCE

MGH Martinos Center for Biomedical Imaging | Boston, MA — Jan 2021 – May 2021; Jan 2022 - Present

Intern, Undergraduate Student Researcher

- Currently designing and fabricating visual stimulus goggles for ultra-high field (7 Tesla) MRI for high resolution studies of functional organization of visual cortex using SOLIDWORKS, Arduino, and EAGLE

Distal Solutions, Inc. | Westborough, MA — July 2021 – Dec 2021

Co-op, Product Development Engineer

- Designed more than 10 assembly and test fixtures including: air permeability test, pre-design verification force tests, simulated use, UV bonding, and press-fits utilizing SOLIDWORKS
- Led development of fixtures from initial concept development through manufacturing using 3D printing, UV curing boxes, and machine shop tools
- Executed, analyzed, and presented tensile, compression, pressure, and leak testing on company products
- Collaborated with a small fast-paced team on proprietary products for a thrombectomy startup

MGH Martinos Center for Biomedical Imaging | Boston, MA — Aug 2020 – Dec 2020

Co-op, Undergraduate Researcher

- Accomplished statistical analysis of functional MRI data in two projects using MATLAB and Linux environment:
  a) Compared cortical-depth-dependent vascular responses driven by visual and physiological stimulus across cortical depths in cerebral amyloid angiopathy (CAA) and healthy subjects
     - *Co-authored conference abstract* of study findings presented at Organization of Human Brain Mapping
  b) Characterized and compared modulation of arousal levels on stimulus-driven hemodynamic responses
     - Developed MATLAB programs to infer subject's arousal levels based on task behavioral data

COTI Laboratory, Northeastern University | Boston, MA — Apr 2019 – Dec 2020

Undergraduate Researcher

- Performed 3-D photon transport simulations, including Monte Carlo and diffusion based, in MATLAB for human brain atlases to explore the experimental impact of scattering coefficient mismatch
- Developed initial hardware and software prototypes for a low-cost tomographic optical imager
- Assisted post doctorate in technological work involving MATLAB and Arduino to operate galvanometers

SKILLS

Technological: SOLIDWORKS, MATLAB, Arduino, Microsoft Office, HTML, CSS, Sketchup, Vectorworks, Mimics, Linux Environment, AutoCAD, C++, Javascript

Fabrication: Laser cutter, 3D printer (SLA and FDM), UV Curing, Soldering Iron, CNC Router, Bandsaw, Chop Saw, Laser Welder, Lathe, Split Die Bonder, Hot Box, Drill Press, Table Saws, OMM

Languages*:* Burmese (Conversational), Chinese (Basic)

BACKGROUND AND INTERESTS

- Projects: Wireless Muscle Powered Bike Signal, Scoliosis Schroth Wall, Coffee Table, Solar Powered USB Charger, Portfolio Website, LED GPS Watch, Dim Sum Coded Drawstring Backpack, iPhone 6 Microscope Attachment
- Community Involvement: Public Library Girls Who Code; Australian Red Cross; Children's Creativity Museum; UC Berkeley's Girls in Engineering
- Travel (Myanmar, Thailand, Australia, New Zealand, Japan), Swimming, Hand Embroidery

References available upon request.